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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,077	10/14/2003	Yves Luthi	2002P17239US (1867-0037)	4362
7590 01/10/2005 Harold C. Moore Maginot, Moore & Beck Bank One Center/Tower 111 Monument Circle, Suite 3000 Indianapolis, IN 46204-5115			EXAMINER BENSON, WALTER	
			ART UNIT 2858	PAPER NUMBER

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/685,077

**Applicant(s)**

LUTHI, YVES

**Examiner**

Walter Benson

**Art Unit**

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on IDS filed 3/15/04.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/14/03 & 3/15/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

1. Claims 1-10 are presented for examination.

### ***Drawings***

2. The drawings are objected to because Figure 1, items 1-5, 6 and 8; Figure 2, item 10; and Figure 4, item 21 require suitable descriptive legends. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. Claim 9 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

### ***Double Patenting***

4. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same

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invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

5. Claims 1 and 4 of this application conflict with claims 1 and 5 of Application No. 10/685,083. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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7. Claims 1-3, 7, 8, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Cota (US Patent No. 5,922,939 and Cota hereinafter).

8. As to claims 1 and 8, Cota discloses an apparatus and method of determining air humidity with a capacitive moisture measuring element, comprising:

a step in which a current moisture signal is ascertained from electrical properties of the moisture measuring element (col. 1, lines 65-67 and col. 2, line 1);

a step in which a corrected moisture signal is calculated from the current moisture signal (col. 3, lines 63-67);

where in a measuring phase with rising relative air humidity RH the corrected moisture signal is the current moisture signal increased by a correction value  $a(RH)$  and wherein in a measuring phase with falling relative air humidity RH the corrected moisture signal is the current moisture signal reduced by a correction value  $a(RH)$  (col. 5, lines 3-13);

a correction unit [claim 8] (col. 2, lines 12-20).

9. As to claim 2, Cota discloses an apparatus and method of determining air humidity with a capacitive moisture measuring element, comprising:

where the correction value  $a(RH)$  is constant (col. 2, lines 8-11).

10. As to claim 3, Cota discloses an apparatus and method of determining air humidity with a capacitive moisture measuring element, comprising:

where the correction value  $a(RH)$  is used from a stored table or is calculated as a mathematical function (col. 4, lines 56-60).

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11. As to claim 7, Cota discloses an apparatus and method of determining air humidity with a capacitive moisture measuring element, comprising:

where the current moisture signal is ascertained with the capacitance of the moisture measuring element (col. 1, lines 75-67 and col. 2 line 1).

12. As to claim 10, Cota discloses an apparatus and method of determining air humidity with a capacitive moisture measuring element, further comprising:

a monitoring unit by which a certain deviation in an ohmic resistance value of the moisture measuring element over a relatively long period of time can be detected and signaled (col. 4, lines 55-60).

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cota in view of Yanagisawa et al. (US Patent No. 5,027,077 and Yanagisawa hereinafter).

Although the system disclosed by Cota shows substantial features of the claimed invention (discussed in the paragraphs above), it fails to disclose:

where charging and/or discharging the capacitive moisture measuring element by way of a first measuring resistor provides for ascertaining a first time constant or a first period duration of the charging and/or discharging operation, and charging and/or discharging the moisture measuring element by way of a second measuring resistor, whose value is different from the value of the first measuring resistor, provides for ascertaining a second time constant or a second period duration of the charging and/or discharging operation [claim 4];

where the capacitance of the moisture measuring element is calculated from the two time constants or the two period durations, and the moisture measuring element for the calculation operation is modeled by a parallel circuit of an ideal capacitor and an ohmic resistance [claim 5];

where the ohmic resistance value of the moisture measuring element is calculated from the two time constants or the two period durations, and the moisture measuring element for the calculation operation is modeled by a parallel circuit of an ideal capacitor and an ohmic resistance [claim 6].

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Cota, as evidenced by Yanagisawa.

Yanagisawa, discloses a humidity sensing apparatus and method having:

where charging and/or discharging the capacitive moisture measuring element by way of a first measuring resistor provides for ascertaining a first time constant or a first period duration of the charging and/or discharging operation [col. 6, lines 1-12], and charging and/or discharging the moisture measuring element by way of a second measuring resistor, whose value is different from the value of the first measuring resistor, provides for ascertaining a second time constant or

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a second period duration of the charging and/or discharging operation [claim 4] (col. 6, lines 13-25) to measure high humidity with high accuracy;

where the capacitance of the moisture measuring element is calculated from the two time constants or the two period durations, and the moisture measuring element for the calculation operation is modeled by a parallel circuit of an ideal capacitor and an ohmic resistance [claim 5] (col. 6, lines 49-51) to determine the humidity;

where the ohmic resistance value of the moisture measuring element is calculated from the two time constants or the two period durations, and the moisture measuring element for the calculation operation is modeled by a parallel circuit of an ideal capacitor and an ohmic resistance [claim 6] (col. 6, lines 27-48).

Given the teaching of Yanagisawa, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying Cota by employing the well known or conventional features of sensor technology, such as disclosed by Yanagisawa, in order provide an improved humidity sensor capable of measuring humidity in a highly accurate manner.

#### **Prior Art Made of Record**

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

A. Gokhfeld (US Paten No. 5,792,938) discloses a method and apparatus that automatically corrects for drift and slow hysteresis;



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B. Davis et al. (US Patent No. 6,724,612 B2) discloses a method and apparatus for measuring humidity.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter Benson whose telephone number is (571) 272-2227. The examiner can normally be reached on Mon to Fri 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on (571) 272-2233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Walter Benson   
Patent Examiner

January 5, 2005

  
**ANJAN DEB**  
**PRIMARY EXAMINER**